REMARKS

In response to the Final Office Action mailed December 30, 2003 no claims have been cancelled, amended, or newly added. Therefore, claims 1-20 remain pending. In view of the following comments, allowance of all the claimed pending in the application is respectfully requested.

I. Claim Rejections under 35 U.S.C. §102

Independent claims 1, 6, 11, and 16 and dependent claims 2, 3, 7, 8, 12, 13, 17, and 18 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,101,500 to Lau ("Lau"). Applicant traverses on the following grounds.

A.   Independent Claims 1, 6, 11, and 16 and Dependent Claims 2, 7, 12, and 17

The invention is directed to a system for enabling <u>client terminal users</u> to manage conceptual information. Independent claims 1, 6, 11, and 16 recite enabling client terminal users to create at least one hierarchical data container and enabling client terminal users to create at least one hierarchical data list that includes the at least one hierarchical data container, wherein the data stored by the at least one hierarchical data list comprises a concept, among other things. In an exemplary embodiment, the system may include an HDC creating module, HDL creating module, command creating module, command submitting module, and HDE creating module. HDC creating module may be used to create an HDC to be stored within an HDL. If an HDL is created, HDL creating module may be used to create the HDL. The HDCs and HDLs created, may be created using one or more commands input by a user. (*See* specification page 29, line 24 – page 30, line 4).

The end users in a client-server communications network access the server for information stored in a database. It is well known in the art that each end user does not have access to all the network management and maintenance functions of a traditional client-server network. The network administrator is typically the only person who has

access to such functions. Applicant submits that Lau clearly discloses a traditional client-server network; and the method disclosed relates to functions that only the network administrator has access to and is not related to <u>client terminal users</u>.

Lau is directed to program for enabling <u>network administrators</u> to manage objects in a hierarchical data structure by determining "a composite index for a network object in the hierarchical structure from one or more parameters, based on <u>expert judgment</u>." (*See* Lau, col. 4, lines 30-36). (<u>Emphasis added</u>). Lau's composite index is determined by combining a first and a second parameterized property, which are associated with a first object, wherein the composite index represents a relative health of the first object and has a standardized value range. (*See* Lau, col. 4, lines 42-45). For example, the state index may assume a value in the range of 0 and 1, inclusively. (*See* Lau, Fig. 5A and col. 13, lines 55-59). To arrive at a value for the state index, the state processor determines index information for a network entity according to the interpreted data and the object rules for the network entity, and transfers the index information to the interface processor for display to the user. (*See* Lau, col. 11, lines 40-47). By determining a health index for the overall health, Lau reduces "the amount of information that <u>must</u> be processed by the <u>network administrator</u>." (*See* Lau, col. 3, lines 6-9). (<u>Emphasis added</u>).

The Examiner asserts that "the network administrator is a user." (*See* page 3, first paragraph of the Final Office Action). Applicant contends; however, that Lau does not disclose the possibility that a client terminal user, other than a <u>network administrator</u> possessing <u>expert judgment</u>, could perform the functions described in Lau's method.

Applicant submits that one of ordinary skill in the art would not equate Lau's network administrator with Applicant's client terminal users. Therefore, Lau fails to disclose enabling <u>client terminal users</u> to manage conceptual information.

Assuming *arguendo* that a network administrator is the same as a client terminal user, the reference still remains deficient, because the claim requires <u>users</u> (plural), and Lau discloses only a <u>single</u> network administrator. Thus, at least for this additional reason, Applicant submits that independent claims 1, 6, 11, and 16 are patentable over Lau.

Since Lau does not disclose the invention claimed in independent claims 1, 6, 11, and 16 and their corresponding dependent claims 2, 3, 7, 8, 12, 13, 17, and 18, these claims clearly are not anticipated by Lau's disclosure. For the foregoing reasons, reconsideration and allowance of these claims are requested.

B.   Dependent Claims 3, 8, 13, and 18

Dependent claims 3, 8, 13, and 18 recite the concept is a color. Lau does not disclose, teach, or suggest this feature.

Rather, Lau discloses a system that represents an indicator associated with a network to a network administrator. (*See* Lau, abstract). The indicator is a flag having a color which represents the degree of confidence of the object. (*See* Lau, abstract). Applicant submits that using a colored indicator to represent a degree of confidence is not the same as Lau's storing conceptual color information in the hierarchical data container, because Lau is not storing the color information in the hierarchical data object itself. Thus, Applicant submits that Lau does not disclose, teach, or suggest claims 3, 8, 13, and 18; therefore they are patentable.

II. Claim Rejections under 35 U.S.C. §103(a)

Dependent claims 4, 5, 9, 10, 14, 15, 19, and 20 stand rejected under 35 U.S.C. §103(a) as allegedly being obvious over Lau in view of U.S. Patent No. 6,034,607 to Becker ("Becker"). Applicant traverses on the following grounds.

A. There is no legally proper suggestion to combine Lau and Becker;

B. Assuming *arguendo* that Lau and Becker may properly be combined, the rejection would still be improper as Lau and Becker, even when combined, fail to disclose, teach, or suggest all of the claim elements.

A.   No Legally Proper Suggestion to Combine Lau and Becker

One of the criteria necessary to establish a *prima facie* case of obviousness is that there be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. Moreover, the teaching or suggestion to make the claimed combination must be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991).

In the Office Action, with regard to dependent claims 4, 5, 9, 10, 14, 15, 19, and 20, the Examiner concedes that Lau "does not explicitly teach the system wherein the color is defined according to a three dimensional color space." (*See* page 5, paragraph number 9 of the May 6, 2003 Office Action).

The Examiner, however, relies on Becker for this feature: "Becker teaches an interpolation method between relational table for the purposes of animating data visualization...includes the features, wherein the color is defined according to a three dimensional color space." (*See* page 5, paragraph 9 of the May 6, 2003 Office Action).

Applicant submits that neither Lau, nor Becker, set forth any teaching, suggestion, or motivation to combine the two references. Further, Applicant contends that no motivation or suggestion to combine Lau or Becker may be found in the knowledge generally available to those skilled in the art.

The Examiner relies on the combination of Lau in view of Becker in the rejection of claims 4, 5, 9, 10, 14, 15, 19, and 20. Applicant respectfully traverses this rejection on the grounds that Becker is non-analogous to the claimed invention.

A two step test has been developed to determine whether a particular reference is within the appropriate scope of the prior art. First, it must be determined whether a particular reference is "within the field of the inventor's endeavor." Second, assuming the reference is outside that field, it must be determined whether the reference is

"reasonably pertinent to the particular problem with which the inventor was involved." *In re Deminski*, 796 F.2d 436 (Fed. Cir. 1986).

First, Applicant submits that the Becker reference is outside the field of the inventor's endeavor.

> Patent examination is necessarily conducted by hindsight, with complete knowledge of the applicant's invention, and the courts have recognized the subjective aspects of determining whether an inventor would be reasonably motivated to go to the field in which the examiner found the reference, in order to solve the problem confronting the inventor... [I]t is...in other words, common sense...in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor...The combination of elements from non-analogous sources, in a manner that reconstructs the applicant's only with the benefit of hindsight, is insufficient to present a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443 (Fed. Cir. 1992).

As to the inventor's field of endeavor, the invention of claims 1-20 is directed to system and method for storing conceptual information as a single object. (*See* "Field of the Invention," specification page 1, lines 8-10).

By contrast, Becker is directed toward visualizing scattered data points using a computer display. (*See* Becker, "Field of Invention"). Thus, Becker's field of endeavor is not within the field of endeavor of the claimed invention.

Since, as detailed above, the Becker reference is outside the inventor's field of endeavor, the inquiry becomes whether the Becker reference is reasonably pertinent to the particular problem(s) with which Applicant was involved, including one or more of the problems of:

1. The problem of requiring intervention of a full time database administrator for the definition of new data objects in a database. (*See* specification page 2, lines 1-4).

2. The problem of existing systems having to transform the data into a format compatible with a table in order to be stored properly leading to reorganization of the database and possible downtime. (*See* specification page 2, lines 12-15).

3.   The problem of applications coded to retrieve a few attributes requiring

multiple server calls leading to increased processing time. (*See*

specification page 3, lines 1-6).

A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would commend itself to an inventor's attention in considering his problem. Thus, the purposes of both the invention and the prior art are important in determining whether the reference is reasonably pertinent to the problem the inventor attempts to solve. If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem, and that fact supports use of that reference in an obviousness rejection. An inventor may well have been motivated to consider the reference when making his invention. If it is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it. *In re Clay,* 966 F.2d 656 (Fed. Cir. 1992).

The Becker reference is more concerned with the problem of visualizing

scattered data when the number of data points is large. (*See* Becker col. 1, lines 34-

36). It is submitted that the Becker reference is not reasonably pertinent to the

particular problem(s) with which Applicant was involved.

A person having ordinary skill in the art would not reasonably have expected to

solve the problem(s) of efficient database management and maintenance by

considering a method of approximating and visualizing a scatter plot. In view of the

above, it is submitted that the Becker reference is non-analogous to the claimed

invention. For at least these reasons, withdrawal of this rejection is earnestly sought.

For at least these reasons, Applicant submits that there is no legally proper

suggestion or motivation to combine Lau with a reference disclosing a method and

system that visually approximates a scatter plot and provides smooth animation of

graphics by interpolated data.

B. Failure to Disclose, Teach or Suggest The Claim Limitations

Assuming *arguendo* that there was a teaching, suggestion, or motivation to combine the two references, the rejection would still be improper as Lau and Becker, even when combined, fail to disclose, teach or suggest all of the claim elements.

Dependent claims 4, 9, 14, 19, recite the feature wherein the color is defined according to a three dimensional color space. This feature is not taught or suggested by Lau or Becker.

In an exemplary embodiment, colors may be stored as equations identifying three (3) dimensional color space. (*See* specification, page 21, lines 10-11). A color attribute may be stored by identifying a red, green, and blue characteristic of a particular color using a predetermined range of values. (*See* specification, page 21, lines 12-14). For example, each red, green, and blue characteristic of a color may be expressed as a percentage from zero (0) to one-hundred (100). (*See* specification, page 21, lines 14-15). For example, a color having red, green, and blue attributes equal to zero (0) may define a black color. (*See* specification, page 21, lines 19-20). Alternatively, if each red, green, and blue attribute is defined as one-hundred (100) percent of each color, then the color defined may be white. (*See* specification, page 21, lines 20-21).

The Examiner acknowledges the Lau is deficient because it does not teach a system wherein the color is defined according to three dimensions. (*See* page 5, paragraph number 9 of the May 6, 2003 Office Action). The Examiner relies on Becker to teach this feature.

The Examiner cites Becker Fig. 3, Fig. 8, col. 3, lines 11-13, lines 26-29, col. 8, lines 30-36, and col. 11, lines 32-38 to support the position that:

> "[I]t would have been obvious to a person of ordinary skill in the art at the time of the Applicant's invention to modify the teachings of Lau with the teachings of Becker to incorporate in Lau's system a three dimensional color space as taught by Becker with the motivation for a user to visualize data into multivariate color for the smooth animation of a scatter plot along one or more additional dimensions." (*See* page 5, paragraph number 9 of the May 6, 2003 Office Action).

Applicant submits that there is no support for this position found in Becker. Becker discloses a three-dimensional splat plot that plots "education," "occupation," and "hours worked," where "income" is mapped to color and an external slider is used to animate over "age." (*See* Becker col. 3, lines 26-30). It appears that Becker is merely plotting the correlation of variables in three dimensions using colors that are mapped to different variables, such that the plot is easier to visualize. Thus, Becker is not <u>defining a color</u> according to a three dimensional color space.

Even if Becker does teach this feature, Becker fails to teach enabling client terminal users to create hierarchical data structures. Thus, Applicant respectfully submits that Lau and Becker, both alone and in combination, are deficient because they fail to teach or suggest the claimed invention.

In view of the foregoing differences between claims 4, 9, 14, 19 and the cited art, Applicant submits that the Examiner has failed to establish a prima facie case of obviousness based on Lau in view of Becker.

Dependent claims 5, 10, 15, and 20 recite the feature wherein the color is defined according to a red, green, and blue attributes of the color. Lau and Becker, both alone and in combination, fail to teach or suggest this feature.

As set forth above, Becker is merely plotting the correlation of variables using colors that are mapped to different variables, such that the plot is easier to visualize. Becker is not <u>defining a color</u> according to a three dimensional color space. Furthermore, Becker does not teach or suggest wherein the color is defined according to red, green, and blue attributes of the color. At best, Becker discloses using red, green, and blue to map to attributes for visualizing scatter plots; however, Becker does not disclose, teach, or suggest defining the color <u>according to</u> red, green, and blue attributes.
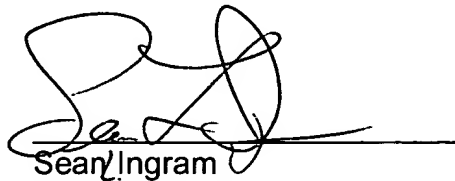
For at least the foregoing reasons, Applicant submits that the Examiner's rejections of the pending claims is improper and should be withdrawn.

Having addressed each of the foregoing rejections, it is respectfully submitted that a full and complete response has been made to the Office Action and, as such, the application is in condition for allowance. Notice to that effect is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

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Respectfully submitted,

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